

2023 Green Logistics Partnership Award
Ministry of Economy, Trade and Industry **Logistics Structural Reform Award**

Project to Establish a Logistics Management Strategy as a “Consignee” and Build a Logistics Strategic Partner Relationship

November 13, 2025
Sho Ishida
AEON Hokkaido Co., Ltd.

Management vision of AEON Hokkaido

Management vision

Becoming a “Company that supports the health and wellness of Hokkaido”

Assisting our customers to lead healthy, enjoyable and fulfilling life every day

Creating the form for a new kind of regional coexistence

Our employees are greatest asset

Practicing management that is transparent, sustainable and stable



- Sales Amt : JPY 354 billion/year
- Number of employees : Approximately : 20,191
- * Approximately one in every 250 people in Hokkaido

Total of 183 stores

* As of February 2024

Overview of Aeon Hokkaido's Logistics

[All the stores in Hokkaido]

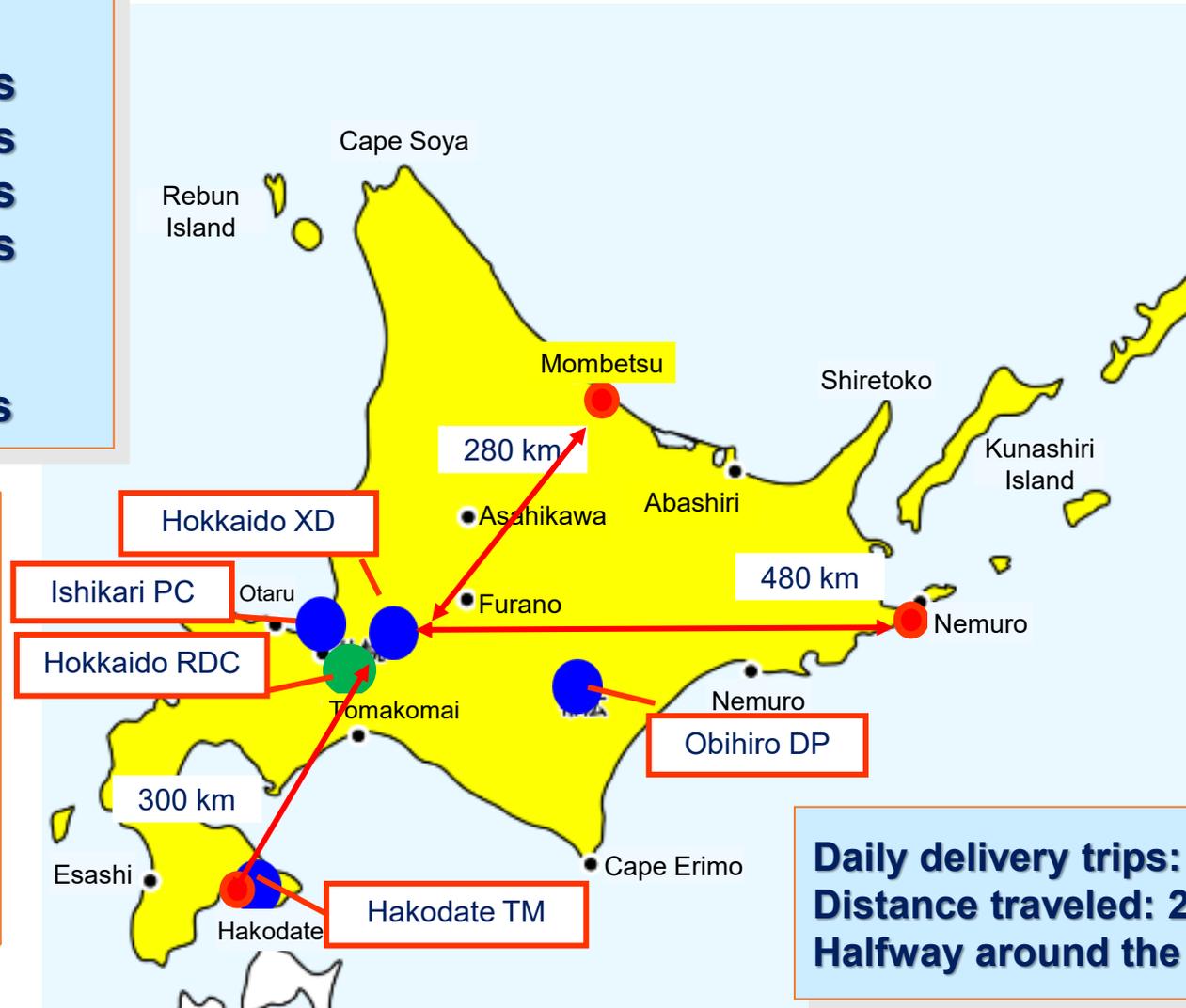
- AEON 48 stores
- MaxValu 62 stores
- The Big 25 stores
- My Basket 44 stores
- AEON Bike 1 store
- Other 2 stores

Total: 183 stores

The easternmost store is in Tokiwa-cho, Nemuro City.
AEON Nemuro store (480 km)

The northernmost store is in Hanazono-cho, Mombetsu City.
AEON Mombetsu store (280 km)

The southernmost store is in Nanae-machi, Hokuto City.
AEON Kamiiso store (300 km)



Daily delivery trips: 436
Distance traveled: 21,800 km
Halfway around the world

Efficiency Enhancement Facilities in Aeon Hokkaido's Logistics Operations

Introduction of labor-saving Facilities

Hokkaido Regional Distribution Center (RDC)
Sorting systems/Automated storage and retrieval system



Equipment/Facilities
Sorting systems: 2 systems, processing capacity 10,000 cases/hour
Automated storage and retrieval system: 10,000 PL
Floor depalletizers: 3 (processing capacity: 700 cases/hour)
Number of loading berths: Shipping 54, Receiving 18, Total of 72
Automatic conveying machines: 30 machines
Nestainers: 600

Ishikari Process Center (PC)
Palletizing machine



Automation of case sorting for each store and product group
3 aisles (2 lines x 11 groups x 5 tiers/aisle)
Number of bays: 2,200
Lifts: 6 units
No. of shuttle units: 30
Shipping capacity: 2,000 CS/h
Receiving capacity: 2,000 CS/h

Investigation into the environmental conditions for newly establishing and operating logistics centers

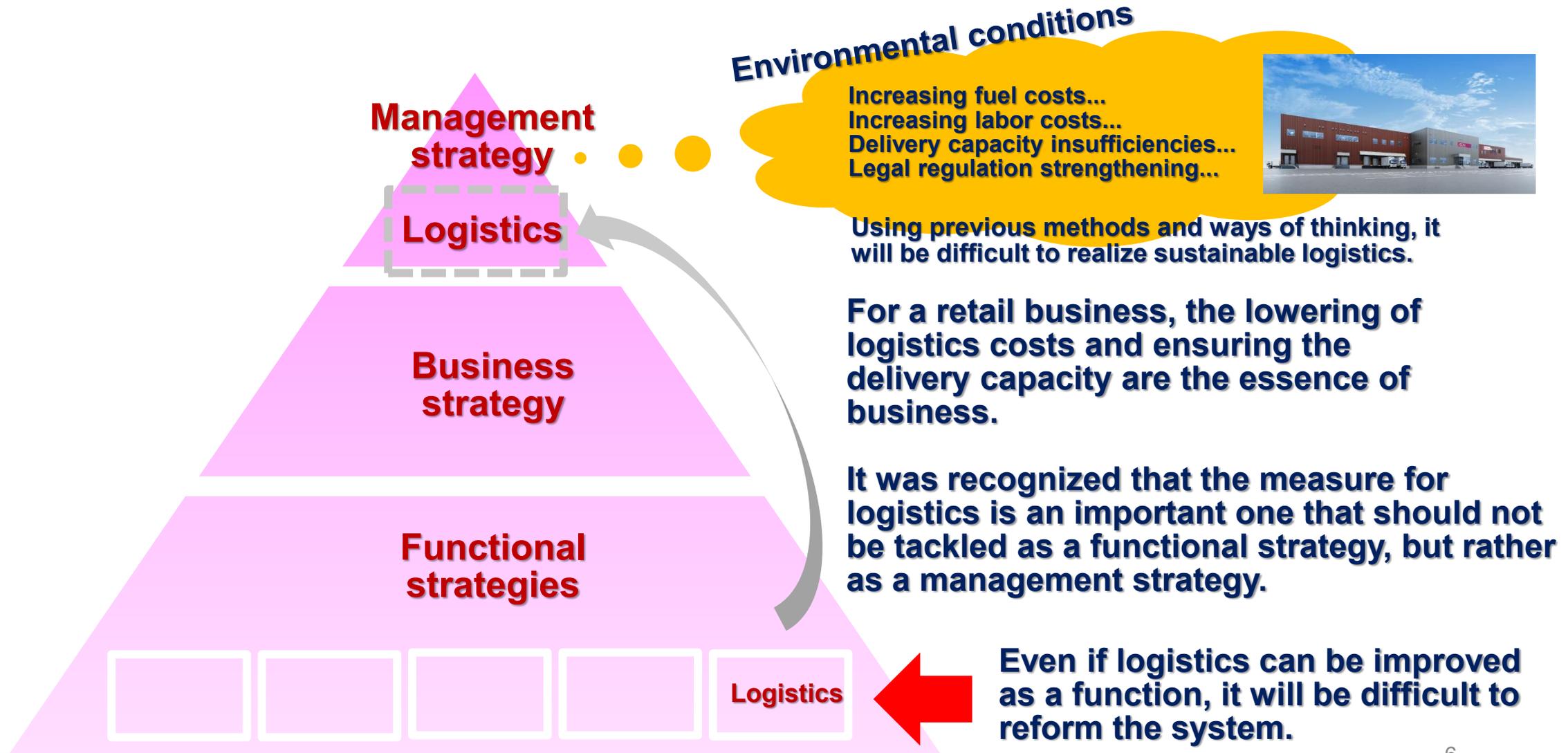
Implementation of reorganization according to the environmental conditions

- Digital transformation (DX) and improvements in efficiency are required due to the increase in distribution volumes and expansion in scale resulting from company mergers.
- Continual requests for price rises from the third-party logistics (3PL) provider (Insufficiency of workers and drivers, fuel cost increases)
- Operation of a new center (Ishikari Process Center) since 2021
- The “FY2024 problem” (Introduction of regulations limiting driver overtime working hours)



It is necessary to convert to a new logistics system without being confined by the previous configuration.

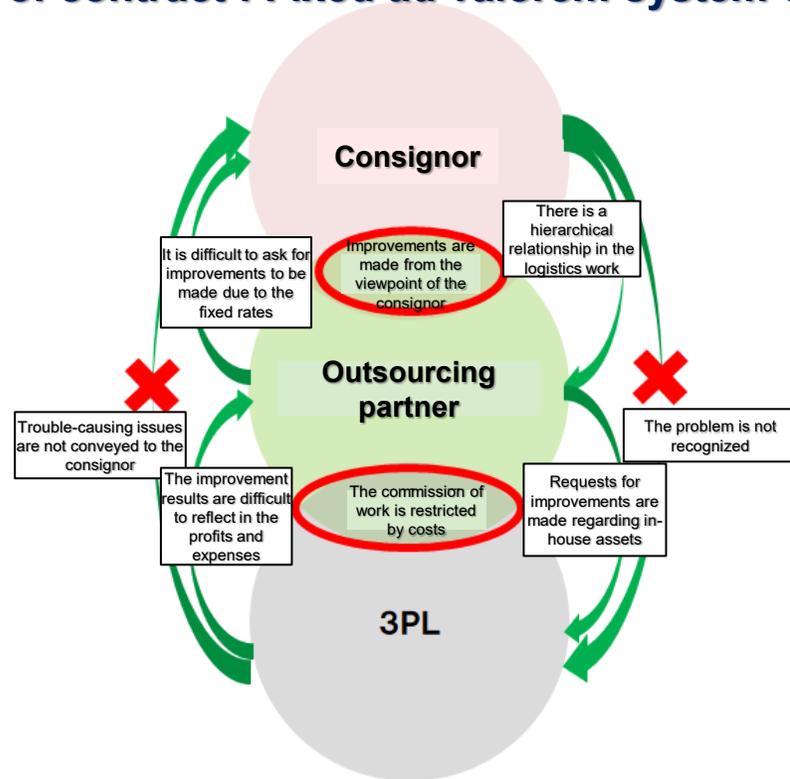
Including the logistics measures in the company's management strategy



Changing the relationships with the outsourcing partner and third-party logistics company (3PL) (Changing the contracts)

Previous approach

Form of contract : Fixed ad valorem system contract

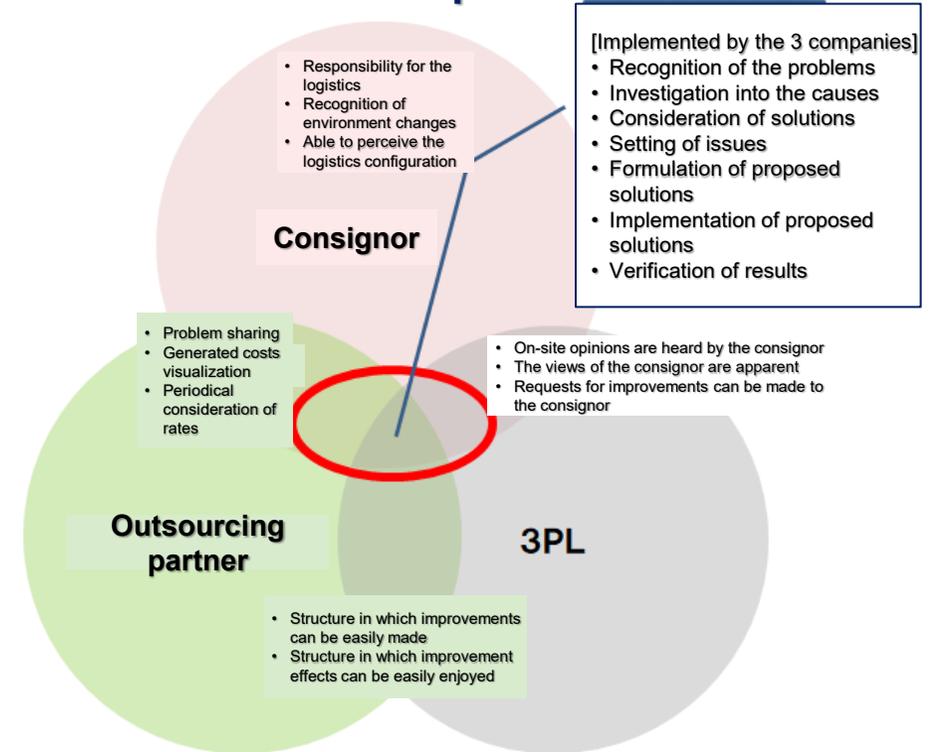


Hierarchical Relationship

(Giving priority to consignor sales and profits)

New approach

Form of contract : Open book contract



Strategic Partners

(Considering logistics as a common asset)

To maximize logistics efficiency, consignor must also take responsibility and actively pursue improvements

Consignor themselves must drive transformation to achieve sustainable, stable, and efficient logistics



Changing the AEON Hokkaido operations

1. Changing the order delivery ratios
2. Changing the order lead times
3. Changing the delivery times to the center by suppliers
4. Change in arrival time at the store

Discussions were held among the three companies to respond to logistics center man-hour insufficiencies, driver insufficiency and the insufficient delivery capacity caused by driver labor time regulations resulting from the 2024 problem.

In order to improve work efficiency and delivery efficiency, four items were identified which required reorganization by AEON Hokkaido, and commitments were made to implement responses under the responsibility of the consignor.

By adjusting the order delivery ratio, will working to reduce the number of morning delivery vehicles and improve the actual vehicle utilization ratio.

1. Changing the order delivery ratio

**Order delivery ratio
Morning 90% : Daytime 10%**

**Loading rates for each delivery
Morning 90% : Daytime 10%**

**Order delivery ratio
Morning 70% : Daytime 30%**

**Loading rates for each delivery
Morning 73% : Daytime 27%**

The delivery ratio for morning deliveries were high, and there was a situation in which trucks were concentrated, making it complicated to increase trucks or allow spot truck deliveries. Daytime deliveries also had low loading rates. In order to increase the delivery ratio of daytime deliveries to 30%, the ordering system delivery ratios were review and changes were made for each supplier, each category and each item.

Due to changes in order lead times, earlier delivery times to the center

2. Changing the order lead times

	Business format	Classification	Order lead time
Before change	GMS	Dairy products	Previous day deadline
	SM	Dairy products	Previous day deadline
		Produce products	Previous day deadline



	Business format	Classification	Order lead time
After change	GMS	Dairy products	Deadline 2 days in advance
	SM	Daily products	Deadline 2 days in advance
		Produce products	Deadline 2 days in advance

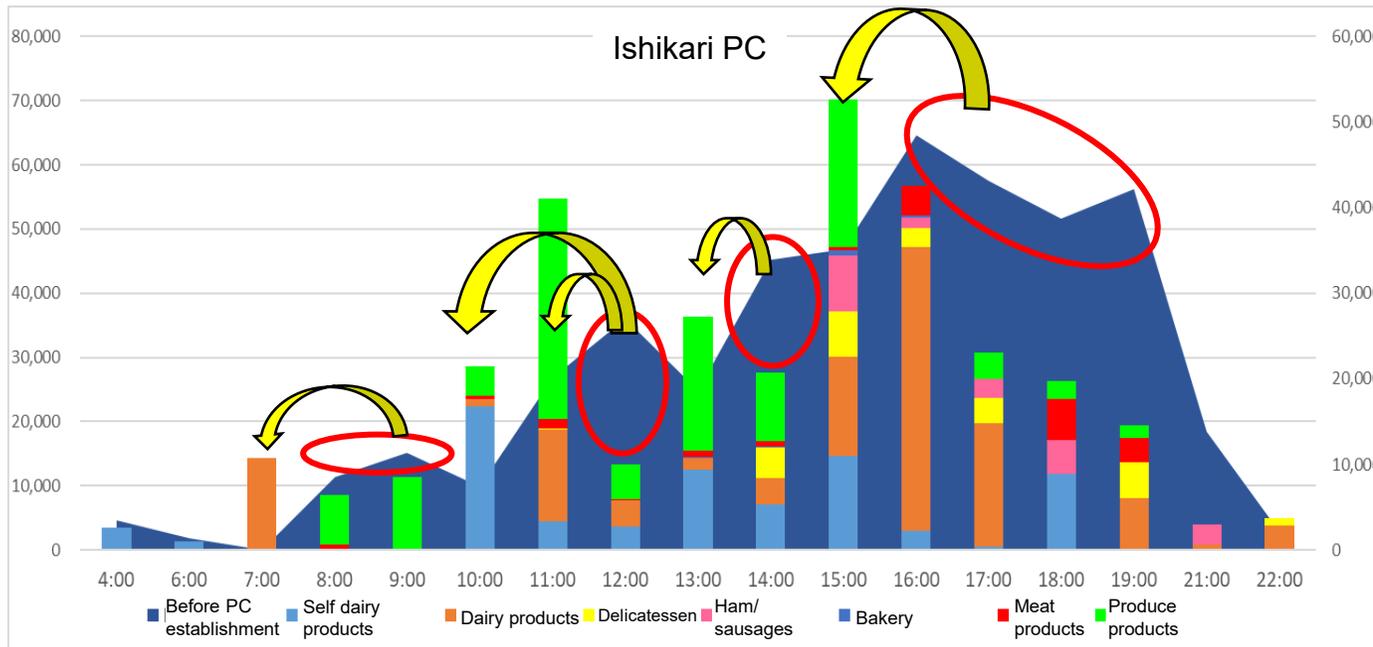
- Supermarket (SM) Produce products: Deadline change to 2 days in advance for total volume
- General merchandise store (GMS) and SM Dairy products: Deadline change to 2 days in advance for 70% of total volume

Adjustment was implemented so that the deliveries became Morning delivery ratio 70% : Daytime delivery 30% according to the total amount of products.

By changing the order lead time, the delivery time to the center by suppliers was made earlier to equalize the work.

Reducing Maximum Waiting Time by Advancing Delivery Times to Process Centers

3. Due to the supplier delivery time Change



Item	Category	FY (Comparison of monthly actual values (July))		Difference 2023 2021
		FY2021	FY2023	
Admitted average number of suppliers	Produce products	43	44	1
	Dairy products	115	116	1
Average waiting time	Produce products	0:20	0:15	-0:05
	Dairy products	0:40	0:15	-0:25
Maximum waiting time	Produce products	1:30	1:00	-0:30
	Dairy products	2:30	1:30	-1:00

By modifying order lead times, consolidating total volumes for produce and dairy products, and implementing digitalization using ASN data for agricultural products, we achieved an earlier delivery time to the center by 1 to 2 hours. This ensures stable sorting operation times. Furthermore, the maximum waiting time for suppliers, which was 2 hours and 30 minutes before implementation, was reduced to 1 hour and 30 minutes afterward.

Increase consolidated delivery and reduce inefficient tasks by utilizing ASN data

3. Due to the supplier delivery time Change

2022-2023		Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Hokkaido XD	Number of companies	1	9	1	2	4	7	0
	Number of cases/day	1,202	1,696	7,896	8,092	11,936	14,053	14,053
	Implementation rate	7%	10%	46%	47%	69%	81%	81%
Ishikari PC	Number of companies	1	9	0	2	1	7	4
	Number of cases/day	802	1,130	1,130	1,261	5,395	6,241	8,804
	Implementation rate	7%	11%	11%	12%	50%	58%	82%

For Produce products in the GMS format, we changed from store-specific deliveries to consolidated deliveries by total volume.

Furthermore, including the SM format, the sorting process—previously done manually using lists—was changed to handheld sorting utilizing ASN data.

This resulted in approximately 80% of produce product handling volume shifting to consolidated delivery and ASN data sorting, reducing the labor time required for manual sorting by 300 M/H per month.

Aiming for maximum efficiency in track operation, will reduce the number of tracks in use

4. Review of Arrival Times for the Store

		FY2023 monthly average	FY2022 monthly average	FY2021 monthly average	Comparison of 2021-2023
2. Number of services	4t = 18 trucks	3,357	3,390	3,778	88.9%
	8t = 22 trucks	685	638	637	107.5%
	10t = 28 trucks	2,637	2,715	2,643	99.8%
	Total	6,679	6,742	7,058	94.6%
3. Number of trucks	4t(41+a)	1,732	1,759	1,931	89.7%
	8t(11+a)	465	428	432	107.6%
	10t(62+a)	1,699	1,702	1,705	99.7%
	Total (114 + a)	3,896	3,889	4,068	95.8%

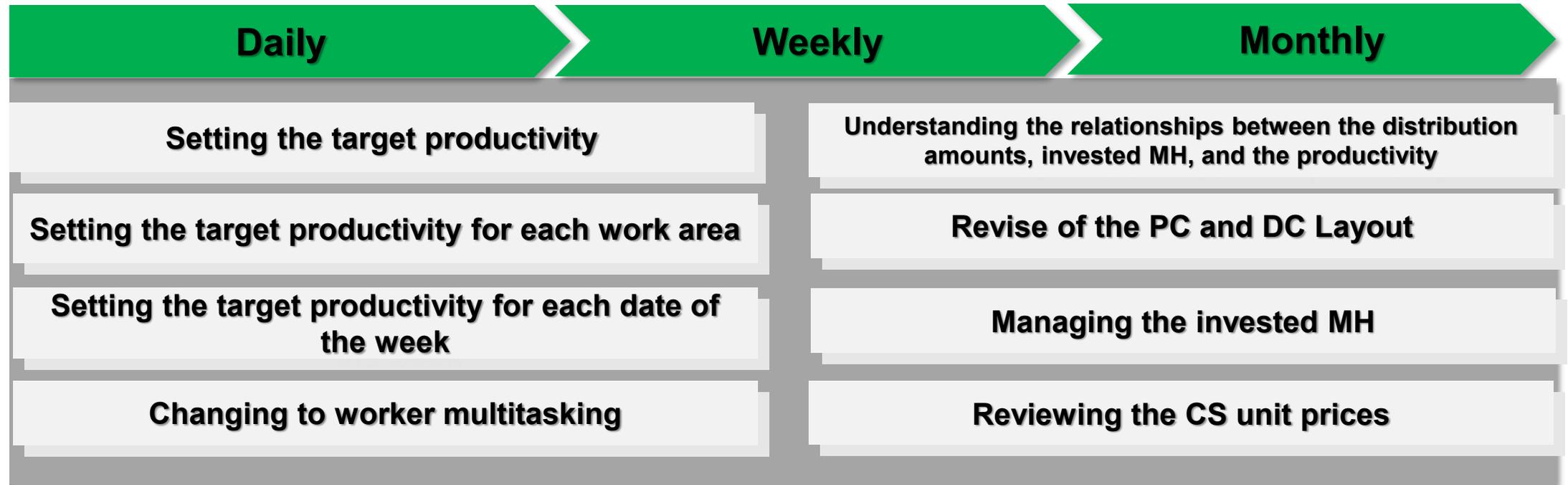
Optimize operations for 4-ton trucks, which have the highest number of works and trucks. Increase the number of 8-ton trucks to improve loading efficiency and promote mixed-load operations.

Furthermore, by implementing time-slot deliveries for the second morning run and later, the load capacity per truck has increased, contributing to the reduction of 4-ton trucks.

Reducing Maximum Waiting Time by Advancing Delivery Times to Process Centers

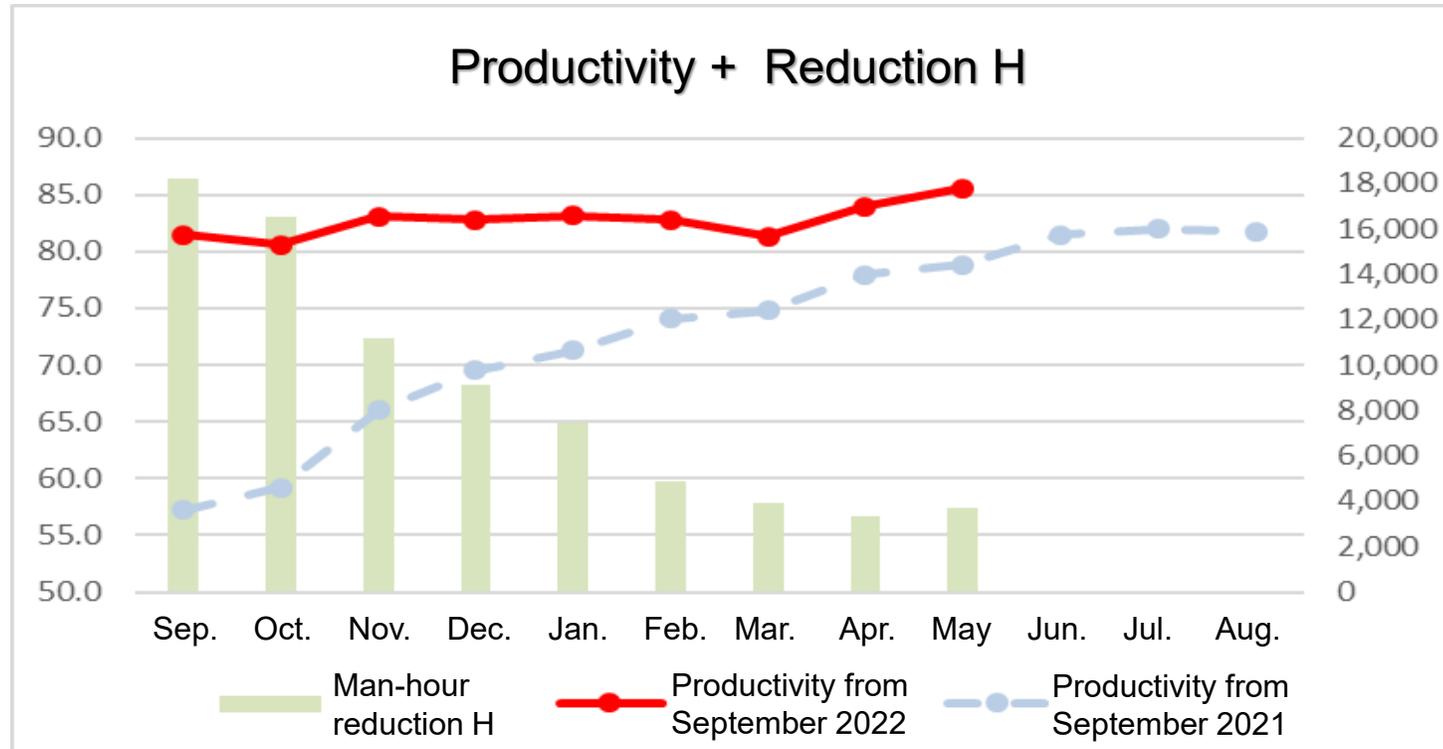
Improvement indicators	Before change	After change	Effect
Delivery ratio	Morning deliveries 90% Daytime deliveries 10%	Morning deliveries 73% Daytime deliveries 27%	Morning deliveries ▲17% reduction Daytime deliveries +17% increase
Delivery times for stores subject to morning deliveries	Time-specified deliveries (Last delivery before 08:00)	Time-specified initial delivery, subsequent deliveries by time frame operation (Last delivery before 09:30)	Reduction by 1 hour 30 minutes
Order lead times	Agricultural products: Previous day deadline Daily necessities: Previous day deadline	Agricultural products: Two days prior Daily necessities: Two days prior	Lead time increased by +1 day
Consolidated delivery ratio (Comparison according to the total amount of products)	Agricultural products: 7% Daily necessities: 16%	Agricultural products: 81.5% Daily necessities: 90%	Agricultural products: +74.5% increase Daily necessities: +74.0% increase
Maximum truck waiting times in the center	2 hours 30 minutes	1 hour 30 minutes	▲40% reduction
No. of services	7,058 services	6,679 services	▲5% reduction
No. of trucks	4,068 trucks	3,896 trucks	▲5% reduction
CO ₂ emissions	1604.7 t-CO ₂	1518.5 t-CO ₂	▲5% reduction
On-premises work man-hour productivity	57 MH/CS	85.1 MH/CS	+49% increase

Committing to the targets, sharing the improvement measures and promoting improvements using PDCA cycles by the three companies



In order to sustainably and stably conduct efficient delivery, the PC and DC work was reviewed, and discussions were held regarding measures that would increase productivity. Meetings were held between the three companies, measures and operations were agreed to improve the PC and DC productivity, and management was implemented using common evaluation standards. The consignor also manages productivity improvement at its site, and is striving to make improvements as a partner.

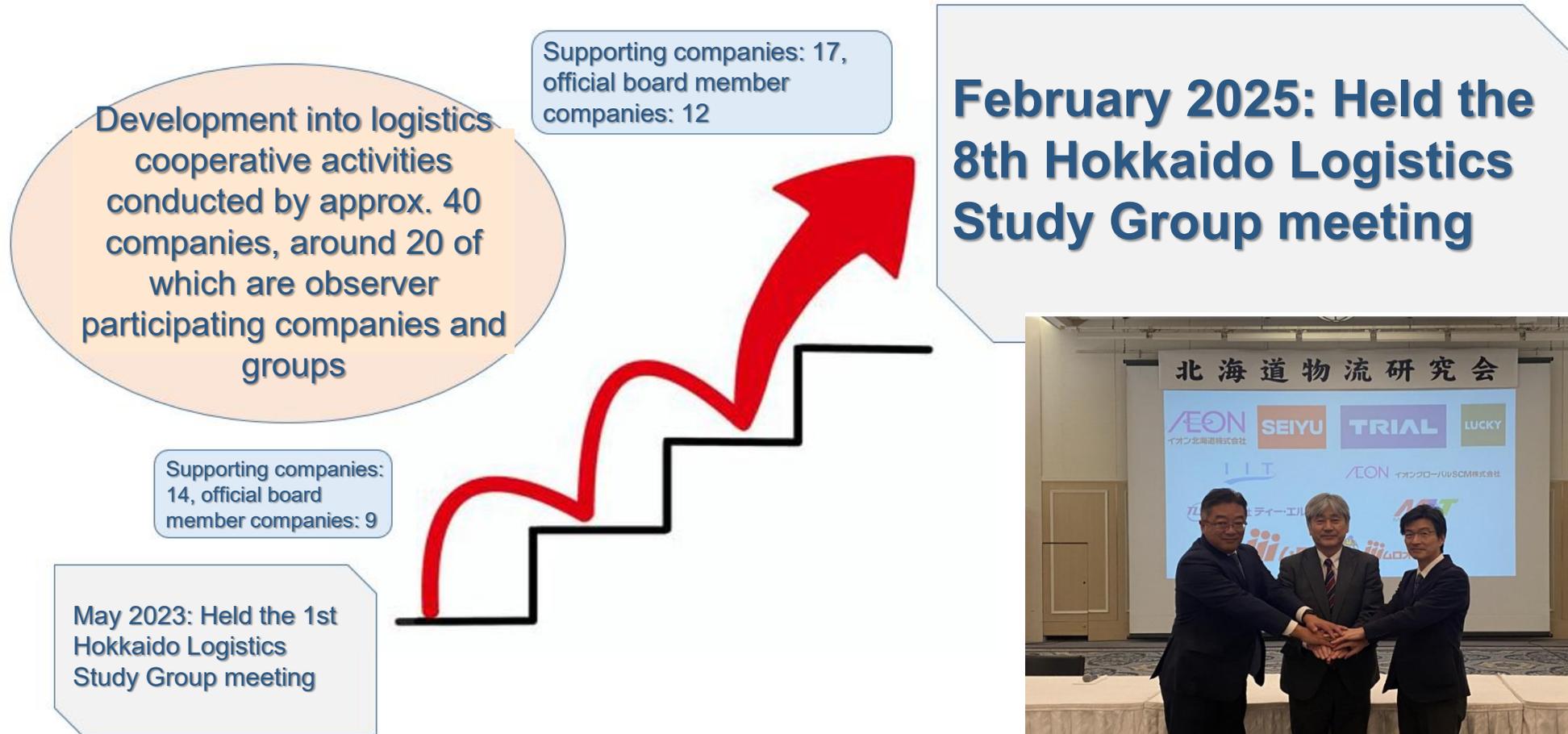
Before and after implementation, PC and DC productivity improved by 28.1 MH/CS



Although the PC and DC work productivity rate was 57 MH/CS at the start of operations in September 2021, this had risen to 85.1 MH/CS by May 2023, showing a 28.1 MH/CS improvement. 18,000 MH were also invested regarding the M/H reduction hour, but this was improved to 4,000 MH. While the initial invested M/H may have been excessive, they were improved by optimization and further improvements in efficiency.

AEON Hokkaido's Initiatives to improve logistics efficiency ①

Establishment and Activities of the Hokkaido Logistics Study Group



AEON Hokkaido's Initiatives to improve logistics efficiency ②

Collaboration through the Hokkaido Logistics study Group

① Making effective use of returning empty trucks

『物流の2024年問題』に“効く”事例集

北海道経産局 『物流の2024年問題』に“効く”事例集へ掲載

店舗マテハン回収のみの運行便を中止し、他社の納品車両の空車戻り便を活用することでお互いにwinwinの関係を構築。
年間37,000kmの走行距離削減、2,390kgのCO2排出量削減の実現

③ Digital matching initiatives to promote joint deliveries

省エネ庁補助金事業として採択

北海道経産局委託事業として採択
データ提供、実証
検証協力

【目指す姿：デジタル、オープン、普及】
物流情報を広範囲に業種間わずら取集
O/D、物量等をデジタル化、オープン化
(匿名化)
事業者間で自由に共同輸送候補を検索可能
とする実効性の高いプラットフォームを実現

② Business operator certification through comprehensive efficiency improvement plan (modal shift)

日用雑貨等の船舶モダリティ

【主要数値】

CO2削減率	約 65.0%削減
ドライバー運転時間の効率化	約 32.9%削減

【特徴】

- 北海道内における船舶モダリティ
- CO2削減率 約 65.0%削減
- ドライバー運転時間の効率化 約 32.9%削減

北海道運輸局、農林水産省、北海道経済産業局による共同認可を受けた事業として計画遂行に向け、継続・拡大中

④ Response to the new Act on Advancement of Integration and Streamlining of Distribution Business (Support for reducing the waiting times and the loading and unloading times)

荷主の貨物自動車運送業務の持続可能な提供の確保に資する運転者の運送及び荷役等の効率化に関する判断の基準の解説書(事例集)

【事例10】(荷役等を行う人員の適切な配置)

イオン北海道
荷役作業の効率化が重要なポイントである。店舗が店内オペレーションに配慮して作業を進める。運量の削減に合わせた適切なタイミングで荷役作業を開始することが難しいことが多く、待機時間、荷役時間(店舗での滞留時間)を短縮することが課題となっている。
そこで、トラック近接を音声と先で店員に知らせる装置を導入し、荷役時刻が店舗に事前通知されることにより、店員がトラックの到着前に待受準備をすることが可能となり、一部店舗への実証導入を通じて平均15%の荷役等時間の短縮を実現。
加えて、荷役の際に店舗従業員が荷役準備が完了して搬入口に出て、近隣住民、顧客への安全配慮を行うことが可能となった。

トラックの接近検知 **traevo platform** 音声・音・光による発報

荷役準備の迅速化・効率化

経済産業省「荷主の貨物自動車運送業務の持続可能な提供の確保に資する運転者の運送及び荷役等の効率化に関する判断の基準の解説書(事例集)」へ当社MV山鼻店で実施中のパトライト共鳴による店着通知運用が掲載